



OCTOBER 2003

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

HOUSTON, TX

G BUSH INTCNTL APT/HOU APT (IAH)
 Lat: 29°59' N Long: 95°21' W Elev (Ground): 118 Feet
 Time Zone: CENTRAL WBAN: 12960 ISSN #:0198-5094

OCTOBER 2003
HOUSTON, TX

DATE	TEMPERATURE °F						DEG DAYS BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION (INCHES)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								DATE
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING		0600 LST	1200 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM					
																			5-SEC		2-MIN			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
01	82	57	70	-5	54	60	0	5		0		0.0	0.00	30.06	30.18	8.1	03	8.7	25	03	18	04	01	
02	76	58	67	-8	50	58	0	2		0		0.0	0.00	30.03	30.15	8.5	06	9.0	22	05	18	04	02	
03	80	54	67	-8	53	59	0	2		0		0.0	0.00	29.92	30.03	3.6	11	5.1	15	11	13	12	03	
04	85	58	72	-2	59	64	0	7	BR	0		0.0	0.00	29.90	30.01	3.3	13	4.4	15	09	12	13	04	
05	88	63	76	2	68	70	0	11	TSRA RA FG+ BR	0		0.0	0.66	29.87	29.98	2.6	17	4.6	25	27	18	27	05	
06	86	70	78	5	71	72	0	13	RA	0		0.0	0.04	29.84	29.95	2.0	05	6.0	22	34	20	34	06	
07	86	68	77	4	70	72	0	12	FG+ BR	0		0.0	0.00	29.85	29.96	2.6	10	4.6	15	05	12	15	07	
08	86	73	80*	7	72	74	0	15	BR	0		0.0	0.00	29.85	29.97	8.5	12	9.0	20	12	16	12	08	
09	79	72	76	3	74	74	0	11	TSRA RA FG BR	0		0.0	3.60	29.73	29.85	6.3	10	9.1	23	21	17	19	09	
10	80	70	75	3	71	72	0	10	RA DZ BR	0		0.0	0.03	29.67	29.78	7.5	01	7.9	18	02	16	03	10	
11	84	69	77	5	69	71	0	12	BR	0		0.0	0.00	29.76	29.88	3.3	05	5.1	14	07	12	06	11	
12	84	69	77	5	69	71	0	12	RA BR	0		0.0	T	29.88	29.99	4.2	04	5.6	13	05	10	08	12	
13	84	72	78	7	70	72	0	13	RA	0		0.0	T	29.81	29.93	3.5	19	3.8	13	18	10	18	13	
14	82	59	71	0	61	66	0	6		0		0.0	0.00	29.86	29.98	8.2	35	9.3	32*	02	24*	01	14	
15	78	54	66	-5	52	58	0	1		0		0.0	0.00	29.99	30.10	5.3	11	7.1	20	10	17	11	15	
16	83	60	72	2	65	67	0	7		0		0.0	0.00	29.94	30.06	5.6	13	7.3	22	15	20	15	16	
17	86	63	75	5	67	70	0	10	RA BR	0		0.0	0.01	29.96	30.08	6.0	34	6.9	25	02	16	35	17	
18	79	55	67	-3	54	59	0	2		0		0.0	0.00	30.04	30.15	5.0	01	5.8	16	36	14	02	18	
19	80	54	67	-3	53	59	0	2		0		0.0	0.00	30.01	30.13	1.8	03	2.9	14	10	9	07	19	
20	84	55	70	1	56	61	0	5		0		0.0	0.00	30.04	30.16	1.5	14	2.1	12	13	9	13	20	
21	86	56	71	2	56	62	0	6	BR	0		0.0	0.00	30.01	30.13	1.3	24	1.9	12	21	9	20	21	
22	89	63	76	8	61	66	0	11	BR	0		0.0	0.00	29.87	29.99	4.0	25	4.7	14	25	12	25	22	
23	90*	60	75	7	61	66	0	10		0		0.0	0.00	29.78	29.90	2.5	16	3.9	13	13	10	15	23	
24	86	63	75	7	65	68	0	10	BR	0		0.0	0.00	29.82	29.94	5.7	17	6.0	22	15	16	17	24	
25	81	66	74	7	67	69	0	9	TSRA RA BR	0		0.0	0.62	29.89	30.01	2.9	16	5.4	25	17	21	16	25	
26	67	52	60	-7	53	55	5	0	RA DZ	0		0.0	0.03	30.02	30.14	12.2	36	12.6	28	01	23	01	26	
27	67	52	60*	-7	47	52	5	0		0		0.0	0.00	29.89	30.01	2.6	30	5.0	13	32	12	34	27	
28	78	48*	63	-3	47	54	2	0		0		0.0	0.00	29.72	29.83	5.4	22	5.8	16	22	13	21	28	
29	81	53	67	1	57	61	0	2		0		0.0	0.00	29.75	29.86	5.6	18	5.7	18	15	15	18	29	
30	86	64	75	9	68	70	0	10		0		0.0	0.00	29.80	29.91	10.4	16	10.5	23	18	20	15	30	
31	83	70	77	11	72	74	0	12	RA	0		0.0	T	29.95	30.07	10.0	14	10.5	21	14	17	13	31	
82.1 61.3 71.7 ■■										61.7 65.4 0.4 7.4		< MONTHLY AVERAGES TOTALS->		0.0 4.99		29.89 30.00		1.1 13 6.3		<- MONTHLY AVERAGES				
0.1 2.5 1.3 ■■										<-----DEPARTURE FROM NORMAL----->		0.49		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 3.63 DATE :09-10			SEA LEVEL PRESSURE DATE TIME												
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: 0.0 DATE :			MAXIMUM : 30.23 01 0853												
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH: 0 DATE :			MINIMUM : 29.75 10 0353												
HEATING: 12 -25			COOLING: 228 32			12 -26			3079 276			NUMBER OF DAYS WITH =>		MAXIMUM TEMP ≥ 90: 1		MINIMUM TEMP ≤ 32: 0		PRECIPITATION ≥ 0.01 INCH : 7						
												MAXIMUM TEMP ≤ 32 : 0		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 3								
												THUNDERSTORMS : 3		HEAVY FOG : 2		SNOWFALL ≥ 1.0 INCH : 0								

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

HOUSTON, TX

OCTOBER 2003

IAH

WBAN # 12960

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	2400 LST	
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			Water	Equiv.
01													01												01		0.00		
02													02												02		0.00		
03													03												03		0.00		
04													04												04		0.00		
05													05						T	0.03	0.52	0.07	0.04	T	05		0.66		
06	0.02	0.02											06												06		0.04		
07													07												07		0.00		
08													08												08		0.00		
09													09	0.05	1.09	0.38	0.57	0.57	0.38	0.01				T	09		3.60		
10	T	0.01	T	T									10											0.01	10		0.03		
11													11												11		0.00		
12													12												12		T		
13													13												13		T		
14													14												14		0.00		
15													15												15		0.00		
16													16												16		0.00		
17													17												17		0.01		
18													18												18		0.00		
19													19												19		0.00		
20													20												20		0.00		
21													21												21		0.00		
22													22												22		0.00		
23													23												23		0.00		
24													24												24		0.00		
25													25	0.05	0.11	0.11			T	T				T	0.19	25	0.62		
26	T	T	T	T									26	T	0.01	T								T	0.02	T	0.03		
27													27												27		0.00		
28													28												28		0.00		
29													29												29		0.00		
30													30												30		0.00		
31													31	T	T										31		T		

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.16	.29	.40	.49	.68	.97	1.09	1.19	1.26	1.49	1.67	2.06
Ending Date	09	09	09	09	09	09	09	09	09	09	09	09
Ending Time (Hour/Min)	1542	1309	1310	1314	1330	1336	1353	1405	1431	1451	1520	1551

Date and time are not entered for TRACE amounts.

Note : The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = Extreme for the month (last occurrence if more than one)

T = Trace precipitation amount

+ = also occurs on earlier date

FG+ = Heavy fog, visibility .25 miles or less
BLANK entries denote missing or unreported data

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24-hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1971–2000

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):
'+' = Heavy ' ' = Moderate '-' = Light

HOUSTON, TX OCTOBER 2003

Ceilometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR–SS), or midnight to midnight (MN–MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0–2 oktas, Partly Cloudy = 3–6 oktas, Cloudy = 7–8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR–SS		MN–MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							10.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							2.50	10.00	
05							.50	10.00	
06							8.00	10.00	
07							.25	10.00	
08							.50	10.00	
09							.50	10.00	
10							2.00	10.00	
11							6.00	10.00	
12							6.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							4.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							7.00	10.00	
21							3.00	10.00	
22							4.00	10.00	
23							10.00	10.00	
24							4.00	10.00	
25							2.00	10.00	
26							8.00	10.00	
27							10.00	10.00	
28							10.00	10.00	
29							10.00	10.00	
30							10.00	10.00	
31							8.00	10.00	
MONTHLY AVGS							6.78	10.00	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 31									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 0 7 18									

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX

OCTOBER 2003

IAH

WBAN # 12960

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)							
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0615				OCT 01				SUNSET: 1808				SUNRISE: 0618				OCT 07				SUNSET: 1801									
03	CLR	NC			10.00	59	55	57	87	3	36	30.06	30.17	03	OVC	003			0.50	FG	70	70	70	100	3	12	29.83	29.95	
06	CLR	NC			10.00	58	53	55	84	7	03	30.07	30.19	06	SCT	NC			6.00	BR	68	68	68	100	5	03	29.86	29.98	
09	CLR	NC			10.00	69	51	59	53	10	04	30.11	30.23	09	SCT	NC			10.00		74	70	71	88	5	VR	29.89	30.01	
12	CLR	NC			10.00	79	50	62	36	15	04	30.08	30.20	12	BKN	028			10.00		82	70	74	67	0	00	29.87	29.98	
15	CLR	NC			10.00	81	52	64	37	10	07	30.03	30.14	15	SCT	NC			10.00		85	67	73	55	6	01	29.80	29.91	
18	FEW	NC			10.00	76	56	64	50	8	01	30.03	30.15	18	BKN	250			10.00		81	70	74	69	12	13	29.80	29.92	
21	CLR	NC			10.00	67	58	62	73	5	03	30.05	30.17	21	OVC	250			10.00		76	72	73	88	7	15	29.85	29.97	
24	CLR	NC			10.00	65	57	60	76	7	06	30.05	30.16	24	OVC	250			6.00	BR	74	72	73	94	3	14	29.86	29.98	
SUNRISE: 0615				OCT 02				SUNSET: 1807				SUNRISE: 0619				OCT 08				SUNSET: 1759									
03	CLR	NC			10.00	63	55	58	76	7	03	30.02	30.14	03	OVC	130			1.50	BR	74	73	73	97	7	06	29.84	29.96	
06	CLR	NC			10.00	60	53	56	78	12	05	30.06	30.18	06	OVC	005			0.50	BR	73	72	72	96	6	11	29.88	29.99	
09	CLR	NC			10.00	65	49	56	56	16	06	30.10	30.22	09	SCT	NC			8.00		78	71	73	79	8	09	29.90	30.02	
12	CLR	NC			10.00	72	46	58	40	13	07	30.06	30.17	12	BKN	032			10.00		84	69	74	61	10	12	29.88	30.00	
15	CLR	NC			10.00	75	47	59	37	9	10	29.98	30.10	15	BKN	042			10.00		86	69	74	57	9	11	29.81	29.93	
18	CLR	NC			10.00	72	48	59	43	9	05	29.98	30.10	18	BKN	130			10.00		80	72	75	76	10	12	29.81	29.93	
21	CLR	NC			10.00	67	49	57	53	7	06	30.00	30.12	21	OVC	130			10.00		76	73	74	91	9	11	29.82	29.93	
24	CLR	NC			10.00	59	52	55	78	0	00	29.98	30.09	24	BKN	130			6.00	BR	76	73	74	91	8	11	29.82	29.93	
SUNRISE: 0616				OCT 03				SUNSET: 1806				SUNRISE: 0619				OCT 09				SUNSET: 1758									
03	CLR	NC			10.00	54	51	52	90	3	34	29.94	30.06	03	OVC	013			7.00		75	74	74	96	9	11	29.77	29.89	
06	CLR	NC			10.00	55	49	52	80	6	05	29.95	30.07	06	OVC	007			5.00	BR	76	74	75	94	8	10	29.77	29.89	
09	FEW	NC			10.00	66	48	56	52	7	07	29.98	30.10	09	OVC	009			4.00	-RA BR	78	75	76	90	10	13	29.78	29.90	
12	FEW	NC			10.00	76	54	63	47	8	15	29.94	30.06	12	OVC	028			5.00	-RA BR	76	74	75	94	8	15	29.75	29.87	
15	BKN	250			10.00	79	53	64	41	8	11	29.87	29.98	15	OVC	008			1.00	+RA BR	74	73	73	97	10	05	29.69	29.81	
18	BKN	250			10.00	76	55	63	48	6	13	29.86	29.97	18	OVC	023			4.00	-RA BR	74	73	73	97	12	09	29.67	29.79	
21	FEW	NC			10.00	67	59	62	76	3	18	29.88	30.00	21	OVC	005			7.00		74	73	73	97	5	35	29.69	29.80	
24	CLR	NC			10.00	63	59	61	87	0	00	29.86	29.98	24	OVC	003			2.50	BR	73	72	72	96	6	34	29.67	29.79	
SUNRISE: 0616				OCT 04				SUNSET: 1805				SUNRISE: 0620				OCT 10				SUNSET: 1757									
03	CLR	NC			10.00	59	57	58	93	0	00	29.85	29.97	03	OVC	003			2.00	DZ	72	72	72	100	6	35	29.64	29.75	
06	FEW	NC			10.00	59	57	58	93	0	00	29.90	30.02	06	OVC	006			10.00		72	71	71	97	12	36	29.65	29.77	
09	FEW	NC			10.00	71	56	62	59	7	10	29.95	30.07	09	OVC	005			10.00	-RA	73	71	72	94	9	02	29.69	29.80	
12	SCT	NC			10.00	80	55	65	42	7	07	29.93	30.05	12	OVC	008			10.00		76	71	73	85	12	03	29.69	29.81	
15	CLR	NC			10.00	83	60	68	46	8	15	29.88	29.99	15	OVC	018			10.00		79	69	72	72	10	04	29.65	29.77	
18	CLR	NC			10.00	79	61	68	54	9	13	29.87	29.99	18	BKN	042			10.00		76	71	73	85	3	33	29.64	29.76	
21	CLR	NC			10.00	70	66	67	87	5	16	29.91	30.03	21	CLR	NC			10.00		72	69	70	91	5	34	29.69	29.81	
24	CLR	NC			2.50 BR	68	68	68	100	5	16	29.89	30.01	24	FEW	NC			10.00		70	68	69	93	3	01	29.68	29.80	
SUNRISE: 0617				OCT 05				SUNSET: 1804				SUNRISE: 0621				OCT 11				SUNSET: 1755									
03	SCT	NC			1.75 BR	67	67	67	100	3	20	29.87	29.98	03	BKN	035			10.00		69	67	68	93	6	VR	29.69	29.81	
06	BKN	040			1.00 BR	64	64	64	100	5	35	29.89	30.01	06	BKN	049			8.00		69	68	68	96	5	04	29.72	29.84	
09	SCT	NC			4.00 BR	72	68	69	87	3	15	29.91	30.03	09	SCT	NC			10.00		76	70	72	82	7	VR	29.77	29.88	
12	BKN	250			10.00	84	68	73	59	6	23	29.87	29.99	12	OVC	035			10.00		82	69	73	65	7	06	29.76	29.88	
15	SCT	NC			10.00	86	65	72	50	5	VR	29.81	29.93	15	OVC	047			10.00		83	68	73	61	5	VR	29.74	29.85	
18	BKN	250			10.00	80	73	75	79	15	14	29.81	29.92	18	BKN	250			10.00		80	69	73	69	8	02	29.77	29.89	
21	OVC	024			6.00 TSRA BR	69	69	69	100	6	20	29.89	30.01	21	BKN	250			10.00		74	69	71	85	0	00	29.82	29.94	
24	BKN	090			10.00	70	70	70	100	0	00	29.86	29.98	24	BKN	250			10.00		72	69	70	91	6	06	29.84	29.96	
SUNRISE: 0618				OCT 06				SUNSET: 1802				SUNRISE: 0621				OCT 12				SUNSET: 1754									
03	OVC	060			10.00	71	71	71	100	7	35	29.81	29.93	03	OVC	050			10.00		70	68	69	93	5	03	29.86	29.97	
06	SCT	NC			8.00	70	70	70	100	6	01	29.85	29.96	06	SCT	NC			10.00		69	68	68	96	7	03	29.88	30.00	
09	BKN	250			10.00	75	72	73	90	6	VR	29.89	30.00	09	SCT	NC			9.00		74	69	71	85	5	08	29.93	30.05	
12	BKN	250			10.00	83	71	75	67	3	VR	29.85	29.96	12	BKN	120			10.00		82	68	73	63	8	08	29.90	30.02	
15	SCT	NC			10.00	82	71	75	69	5	32	29.79	29.91	15	OVC	065			10.00		83	67	72	59	7	02	29.86	29.98	
18	SCT	NC			10.00	78	69	72	74	5	17	29.80	29.91	18	OVC	120			10.00		80	70	73	71	8	03	29.83	29.95	
21	OVC	042			10.00	75	68	70	79	9	13	29.84	29.96	21	OVC	060			10.00		77	70	72	79	6	05	29.86	29.98	
24	FEW	NC			10.00	72	70	71	94	6	04	29.83	29.94	24	OVC	130			10.00		74	71	72	91	3	24	29.87	29.98	

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX

OCTOBER 2003

IAH

WBAN # 12960

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)									
			OBSERVATION TIME (LST)	EFF CLD AMT Okta/s		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL				OBSERVATION TIME (LST)	EFF CLD AMT Okta/s		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL								
SUNRISE: 0622						OCT 13						SUNSET: 1753						SUNRISE: 0626						OCT 19						SUNSET: 1747					
03	OVC	100				74	71	72	91	0	00	29.84	29.96	03	CLR	NC					57	54	55	90	0	00	29.99	30.11							
06	OVC	110				74	71	72	91	0	00	29.84	29.96	06	CLR	NC					56	53	54	90	0	00	30.02	30.14							
09	OVC	070				76	71	73	85	0	00	29.87	29.98	09	CLR	NC					66	53	59	63	3	VR	30.07	30.19							
12	OVC	075				80	67	71	64	7	21	29.85	29.96	12	FEW	NC					76	48	60	37	6	36	30.04	30.16							
15	OVC	130				83	68	73	61	6	18	29.76	29.88	15	CLR	NC					80	48	62	33	5	09	29.97	30.09							
18	BKN	100				78	69	72	74	5	18	29.74	29.86	18	CLR	NC					75	52	62	45	6	05	29.97	30.09							
21	SCT	NC				75	68	70	79	6	19	29.76	29.88	21	CLR	NC					65	58	61	78	0	00	30.00	30.12							
24	CLR	NC				72	69	70	91	6	18	29.75	29.87	24	CLR	NC					59	56	57	90	0	00	30.01	30.12							
SUNRISE: 0623						OCT 14						SUNSET: 1752						SUNRISE: 0627						OCT 20						SUNSET: 1746					
03	OVC	040				74	71	72	91	0	00	29.75	29.87	03	CLR	NC					56	54	55	93	0	00	30.02	30.14							
06	BKN	085				73	71	72	94	0	00	29.79	29.91	06	CLR	NC					55	53	54	90	0	00	30.05	30.16							
09	BKN	008				78	72	74	82	12	30	29.85	29.96	09	FEW	NC					68	58	62	70	3	30	30.09	30.20							
12	SCT	NC				80	59	67	49	21	35	29.86	29.98	12	SCT	NC					79	55	65	44	0	00	30.06	30.18							
15	FEW	NC				82	49	63	32	20	02	29.85	29.97	15	CLR	NC					83	50	64	32	7	13	30.01	30.13							
18	FEW	NC				73	49	60	43	10	01	29.90	30.02	18	FEW	NC					75	57	64	54	5	16	30.01	30.13							
21	CLR	NC				63	53	57	70	6	34	29.97	30.09	21	SCT	NC					67	58	62	73	0	00	30.05	30.16							
24	FEW	NC				59	52	55	78	3	01	29.96	30.08	24	CLR	NC					61	58	59	90	0	00	30.04	30.16							
SUNRISE: 0623						OCT 15						SUNSET: 1751						SUNRISE: 0627						OCT 21						SUNSET: 1745					
03	FEW	NC				58	50	54	75	7	01	29.96	30.08	03	CLR	NC					59	57	58	93	0	00	30.02	30.14							
06	FEW	NC				55	51	53	87	3	35	30.00	30.11	06	CLR	NC					57	55	56	93	3	33	30.05	30.16							
09	FEW	NC				66	50	57	56	10	09	30.04	30.16	09	CLR	NC					69	64	66	84	5	32	30.08	30.20							
12	FEW	NC				75	48	60	39	10	11	30.02	30.14	12	CLR	NC					81	56	66	42	0	00	30.04	30.16							
15	FEW	NC				77	50	62	39	9	13	29.96	30.08	15	CLR	NC					85	50	64	30	0	00	29.97	30.09							
18	SCT	NC				71	53	61	53	10	13	29.95	30.07	18	CLR	NC					74	56	63	54	0	00	29.94	30.06							
21	CLR	NC				65	57	60	76	8	13	29.97	30.09	21	FEW	NC					73	55	62	53	8	20	29.98	30.09							
24	CLR	NC				62	57	59	84	6	12	29.95	30.06	24	CLR	NC					66	62	64	87	5	23	29.95	30.07							
SUNRISE: 0624						OCT 16						SUNSET: 1750						SUNRISE: 0628						OCT 22						SUNSET: 1744					
03	CLR	NC				61	58	59	90	5	05	29.94	30.06	03	CLR	NC					65	63	64	93	5	28	29.93	30.05							
06	FEW	NC				60	58	59	93	5	03	29.97	30.09	06	CLR	NC					63	61	62	93	3	24	29.93	30.04							
09	SCT	NC				71	63	66	76	8	10	30.01	30.12	09	CLR	NC					72	63	66	73	5	26	29.95	30.06							
12	BKN	028				80	67	71	64	15	13	29.97	30.09	12	CLR	NC					84	60	69	44	8	28	29.88	30.00							
15	BKN	055				81	69	73	67	15	13	29.90	30.02	15	CLR	NC					88	57	69	35	6	VR	29.80	29.92							
18	BKN	120				76	70	72	82	12	14	29.90	30.01	18	CLR	NC					77	63	68	62	5	23	29.79	29.91							
21	SCT	NC				73	70	71	90	5	16	29.91	30.03	21	CLR	NC					70	63	66	79	0	00	29.82	29.94							
24	BKN	021				72	70	71	94	6	17	29.88	30.00	24	CLR	NC					70	60	64	71	5	25	29.81	29.93							
SUNRISE: 0624						OCT 17						SUNSET: 1749						SUNRISE: 0629						OCT 23						SUNSET: 1743					
03	BKN	027				72	71	71	97	0	00	29.91	30.02	03	CLR	NC					64	60	62	87	0	00	29.78	29.90							
06	OVC	011			BR	71	70	70	96	3	34	29.94	30.06	06	CLR	NC					61	58	59	90	0	00	29.80	29.91							
09	BKN	008				77	73	74	88	7	27	29.97	30.09	09	CLR	NC					72	61	65	69	0	00	29.82	29.94							
12	BKN	038				83	70	74	65	12	34	29.95	30.07	12	CLR	NC					85	61	70	45	3	VR	29.79	29.91							
15	FEW	NC				86	65	72	50	14	33	29.93	30.04	15	CLR	NC					89	57	69	34	3	VR	29.73	29.85							
18	SCT	NC				77	62	68	60	9	34	29.96	30.08	18	FEW	NC					81	64	70	57	9	13	29.74	29.86							
21	CLR	NC				69	59	63	70	7	35	30.03	30.14	21	CLR	NC					74	62	67	67	6	17	29.78	29.90							
24	CLR	NC				63	58	60	84	3	34	30.04	30.16	24	CLR	NC					70	65	67	84	3	18	29.78	29.90							
SUNRISE: 0625						OCT 18						SUNSET: 1748						SUNRISE: 0629						OCT 24						SUNSET: 1742					
03	CLR	NC				60	57	58	90	5	VR	30.04	30.16	03	CLR	NC					66	65	65	96	5	17	29.77	29.89							
06	FEW	NC				57	54	55	90	5	02	30.07	30.18	06	CLR	NC					63	62	62	97	0	00	29.80	29.92							
09	FEW	NC				64	53	58	68	10	07	30.10	30.22	09	SCT	NC					73	69	70	87	7	22	29.86	29.98							
12	CLR	NC				74	54	62	50	9	35	30.06	30.18	12	BKN	250				83	65	71	55	8	18	29.84	29.96								
15	CLR	NC				79	52	63	39	9	35	29.99	30.10	15	BKN	250				84	62	70	48	13	16	29.78	29.90								
18	FEW	NC				73	53	61	50	6	36	30.00	30.11	18	BKN	250				77	63	68	62	9	16	29.81	29.93								
21	CLR	NC				65	55	59	70	0	00	30.02	30.14	21	BKN	250				73	66	69	79	6	15	29.84	29.96								
24	CLR	NC				62	55	58	78	0	00	30.01	30.13	24	BKN	040				73	67	69	81	7	16	29.84	29.96								

OBSERVATIONS AT 3-HOURLY INTERVALS

HOUSTON, TX

OCTOBER 2003

IAH

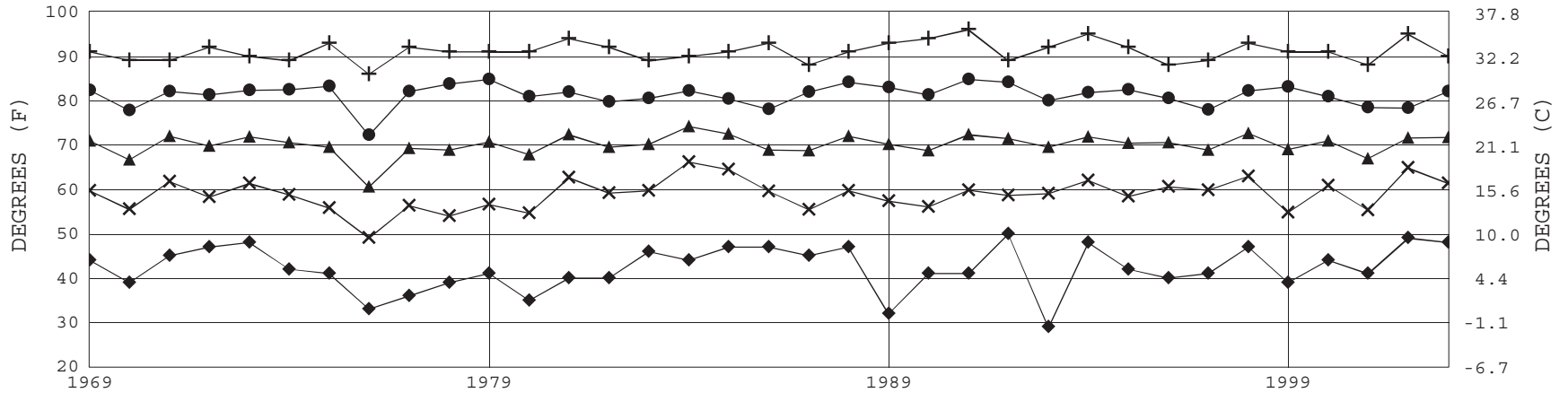
WBAN # 12960

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)							
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	SPEED (MPH)		DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
<p style="text-align: center;">SUNRISE: 0630 OCT 25 SUNSET: 1741</p>																													
03	OVC	070		10.00		72	68	69	87	5	14	29.84	29.96	03	OVC	020		10.00	-RA	76	74	75	94	10	17	29.87	29.98		
06	BKN	090		10.00		72	69	70	91	5	16	29.85	29.96	06	BKN	022		10.00		75	73	74	94	8	15	29.90	30.01		
09	OVC	034		10.00		79	71	74	77	13	14	29.89	30.00	09	OVC	028		10.00		79	73	75	82	14	15	29.96	30.08		
12	OVC	060		10.00	-TSRA	72	68	69	87	0	00	29.93	30.05	12	OVC	040		10.00		82	71	75	69	15	13	29.97	30.09		
15	BKN	100		10.00		67	64	65	91	13	14	29.87	29.99	15	OVC	070		10.00		80	72	75	76	12	13	29.94	30.06		
18	BKN	120		10.00		68	66	67	93	3	30	29.87	29.98	18	OVC	064		10.00		77	71	73	82	12	13	29.98	30.09		
21	BKN	120		10.00		66	66	66	100	6	35	29.93	30.05	21	BKN	070		10.00		73	70	71	90	9	12	30.01	30.13		
24	OVC	060		10.00	-RA	68	67	67	96	6	32	29.97	30.09	24	SCT	NC		8.00		71	70	70	96	5	12	30.01	30.13		
<p style="text-align: center;">SUNRISE: 0631 OCT 26 SUNSET: 1740</p>																													
03	BKN	250		10.00	-RA	62	57	59	84	9	33	29.98	30.10	<p style="text-align: center;">3-HOURLY OBSERVATION NOTES</p> <p>Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibility = 8/8. Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC= No ceiling detected. & = Original observation contained additional weather elements. See page 3 for additional notes.</p>															
06	BKN	250		10.00		60	54	57	80	13	34	29.98	30.10																
09	OVC	009		8.00	DZ	60	57	58	90	14	36	30.06	30.18																
12	OVC	010		8.00	DZ	58	53	55	84	20	01	30.05	30.17																
15	OVC	008		10.00		55	52	53	90	16	36	30.01	30.12																
18	OVC	022		10.00		54	51	52	90	8	34	30.03	30.15																
21	OVC	065		10.00	-RA	53	48	50	83	18	03	30.01	30.14																
24	BKN	130		10.00		53	50	51	89	8	36	30.01	30.13																
<p style="text-align: center;">SUNRISE: 0631 OCT 27 SUNSET: 1739</p>																													
03	CLR	NC		10.00		53	52	52	96	3	31	29.98	30.10																
06	BKN	250		10.00		52	49	50	89	6	33	29.96	30.08																
09	OVC	130		10.00		53	47	50	80	7	34	29.95	30.07																
12	OVC	130		10.00		59	42	51	54	8	33	29.93	30.05																
15	SCT	NC		10.00		66	40	53	39	6	31	29.84	29.95																
18	SCT	NC		10.00		59	49	54	69	0	00	29.80	29.92																
21	SCT	NC		10.00		57	47	52	69	7	20	29.80	29.92																
24	FEW	NC		10.00		53	46	50	77	5	20	29.77	29.89																
<p style="text-align: center;">SUNRISE: 0632 OCT 28 SUNSET: 1738</p>																													
03	CLR	NC		10.00		52	46	49	80	3	24	29.74	29.86																
06	CLR	NC		10.00		52	44	48	75	7	21	29.72	29.84																
09	CLR	NC		10.00		62	44	53	52	7	22	29.75	29.87																
12	FEW	NC		10.00		74	43	57	33	7	24	29.70	29.82																
15	FEW	NC		10.00		77	44	59	31	8	24	29.65	29.77																
18	FEW	NC		10.00		68	51	58	55	3	22	29.67	29.79																
21	FEW	NC		10.00		64	50	56	61	6	19	29.72	29.84																
24	CLR	NC		10.00		61	53	57	75	5	19	29.73	29.84																
<p style="text-align: center;">SUNRISE: 0633 OCT 29 SUNSET: 1737</p>																													
03	CLR	NC		10.00		56	53	54	90	0	00	29.74	29.85																
06	FEW	NC		10.00		54	52	53	93	0	00	29.75	29.87																
09	SCT	NC		10.00		67	56	61	68	5	20	29.79	29.91																
12	BKN	250		10.00		77	56	64	48	10	18	29.77	29.89																
15	SCT	NC		10.00		80	56	65	44	12	17	29.71	29.83																
18	SCT	NC		10.00		73	59	64	62	13	17	29.72	29.83																
21	SCT	NC		10.00		68	62	64	81	5	17	29.75	29.87																
24	SCT	NC		10.00		65	62	63	90	5	17	29.75	29.86																
<p style="text-align: center;">SUNRISE: 0634 OCT 30 SUNSET: 1736</p>																													
03	SCT	NC		10.00		65	63	64	93	6	16	29.74	29.86																
06	BKN	039		10.00		64	63	63	96	3	16	29.76	29.88																
09	BKN	250		10.00		76	67	70	74	13	16	29.80	29.92																
12	BKN	042		10.00		83	66	72	57	14	18	29.80	29.92																
15	BKN	250		10.00		83	69	74	63	16	15	29.77	29.88																
18	BKN	070		10.00		78	70	73	76	13	16	29.80	29.92																
21	BKN	033		10.00		76	73	74	91	13	15	29.84	29.96																
24	OVC	012		10.00		76	73	74	91	8	16	29.87	29.99																

SUMMARY BY HOUR

HOUR (LST)	AVERAGES											RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	SPEED	DIRECTION	
							STATION	SEA LEVEL					
01			66	62	64	88	29.88	30.00	8.94	4	1	16	
02			65	62	63	90	29.88	30.00	8.78	4	0	0	
03			65	62	63	91	29.87	29.99	8.54	4	1	4	
04			64	61	63	91	29.87	29.99	8.56	4	2	3	
05			64	61	62	92	29.88	30.00	8.44	4	2	3	
06			63	61	62	92	29.89	30.01	8.40	5	2	3	
07			64	61	62	91	29.90	30.02	7.82	4	2	6	
08			67	62	64	86	29.92	30.04	8.72	5	2	5	
09			71	62	66	75	29.93	30.05	9.32	7	2	9	
10			74	62	67	66	29.93	30.05	9.65	8	2	9	
11			76	61	67	61	29.92	30.04	9.72	8	2	9	
12			78	60	67	57	29.91	30.02	9.77	8	2	7	
13			79	60	67	55	29.88	30.00	9.58	8	2	10	
14			80	60	67	53	29.86	29.98	9.58	8	2	10	
15			80	59	67	52	29.85	29.97	9.71	8	3	9	
16			80	59	67	52	29.85	29.97	9.73	9	3	9	
17			78	60	67	56	29.85	29.96	9.74	9	4	10	
18			75	62	67	66	29.85	29.97	9.81	8	4	11	
19			72	63	67	73	29.87	29.98	10.00	6	2	12	
20			71	63	66	76	29.88	30.00	9.97	6	2	13	
21			69	62	65	79	29.89	30.01	9.77	6	2	13	
22			68	63	65	83	29.89	30.01	9.61	5	1	13	
23			68	63	65	87	29.89	30.01	9.48	4	1	14	
24			67	63	65	88	29.88	30.00	9.19	4	1	14	

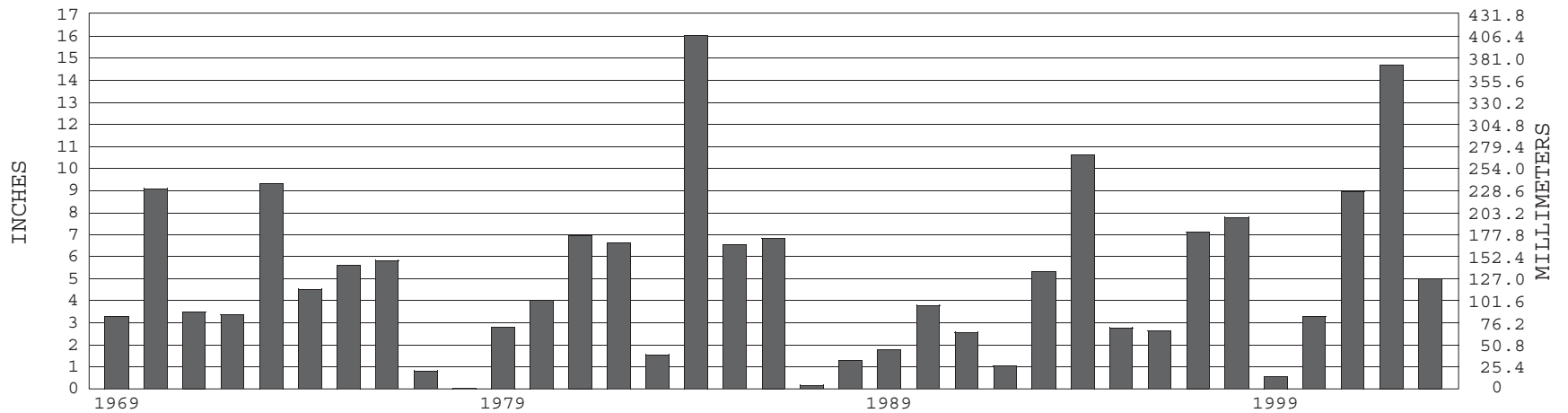
HOUSTON, TX OCTOBER TEMPERATURES



+ Extreme Max. ● Mean Max. ▲ Mean × Mean Min. ◆ Extreme Min.

Long-Term (1969-2003) Mean: 70.1 1961-1990 Normal: 70.4

HOUSTON, TX OCTOBER PRECIPITATION



Long-Term (1969-2003) Mean Monthly Total: 5.03

1961-1990 Normal: 4.50



OCTOBER 2003

HOUSTON, TX

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA – National Weather Service / Department Of Transportation – Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.

DIRECTOR

NCDC now offers an annual online subscription for the **Edited Local Climatological Data Publication**. When you purchase this subscription service, you will have **immediate online access** to all previous publications back to July 1996 and all publications thereafter until the expiration of the subscription. Your subscription is valid for one year after purchase. **The total cost is \$29 for online delivery (including back issues) compared to \$34 for offline delivery.** To order this and other subscriptions online with your credit card, go to: www.ncdc.noaa.gov and choose subscriptions.

We welcome your questions or comments, please contact us at
Toll Free Number (866) 742–3322 (voice)
Fax Number :(304) 726–4409
TDD : 828–271–4010
or Email : ncdc.info@noaa.gov
Local Climatological Data is available at www.ncdc.noaa.gov

For address correction, please return a photocopy of this page to Subscription Services indicating changes

NCDC Subscription Services Center
310 State Route 956 Building 300
Rocket Center, WV 26726

OFFICIAL BUSINESS. PENALTY FOR PRIVATE USE \$300

FIRST CLASS
POSTAGE AND FEES PAID
NOAA
PERMIT G-19